

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims**

1. (Currently Amended) A storage area network (SAN), comprising:

a plurality of storage devices;

a plurality of digital data processors, each having a file system that effects access to one or more of the storage devices coupled to the SAN[[and ]]; and

a process in communication with the digital data processors, wherein the process responding responds to a notification ~~on behalf of~~ at least a selected from one of the digital data processors requesting [[for]] extension of the file system at the requesting digital data processor in ~~accord~~ accordance with a hierarchically defined file extension policy, wherein the hierarchically defined extension policy indicates a hierarchical arrangement of groups of attributes for configuring the extension of the file system, and wherein the process adds storage to the file system of the requesting digital processor to implement the request for the extension of the file system according to the attributes in the at least one group of attributes associated with the requesting digital data processor.

2. (Currently Amended) The SAN of claim 1, wherein the groups of attributes include

~~the process responds to a file system notification on behalf of the selected digital data processor in accord with a policy defined, in part, for a first group to which that digital data processor belongs and, in part, for a second group to which that digital data processor belongs, [[the]] a first group being at a first hierarchical level and [[the]] a second group being at a second hierarchical level, where wherein the first hierarchical level is hierarchically above the second hierarchical level, and [[where]] wherein the requesting digital data processor is associated with the first and second groups, and wherein the first group is further associated with includes digital data processor(s) in the second group as well as at least one digital data processor other than the selected requesting digital data processor.[[.]]~~

3. (Currently Amended) The SAN of claim [1] 2, wherein  
the first group is associated with a first set of plural file extension attributes defining a  
default policy for digital data processors included in associated with that group and wherein the  
second group is associated with a second set of one or more file extension configuration  
attributes, wherein a definition of an attribute in the second set overrides a definition for that  
attribute in the first set, each corresponding to and overriding an attribute in the first set, where  
wherein the configuration attributes of the second set, taken in conjunction with non-overridden  
configuration attributes of the first set, define a policy for the second group, wherein the process  
configures the responds to a notification for file extension on behalf of the selected requesting  
digital data processor using the attributes in accordance with a the policy defined for the second  
group.

4. (Currently Amended) The SAN of claim 2, wherein the attributes are a member of  
a set of configuration attributes comprising: can identify any of a utilization threshold above  
which file system extension is requested, one or more storage devices accessible for file system  
extension, a range of storage capacities for accessible storage devices to be assigned for file  
system extension, maximum file system size, [[and]] a flag indicating whether file system  
utilization is monitored, and an alert interval for notifying a SAN administrator of a file system  
utilization exceeding a threshold since a previous notification.

5. (Canceled)

6. (Currently Amended) The SAN of claim 2, wherein a database coupled to the  
process stores the hierarchical arrangement of the groups of attributes.

7-15. (Canceled)

16. (Currently Amended) A method operating [[In]] in a storage area network (SAN)  
comprising one or more digital data processors and one or more storage devices, each having a  
file system that effects access to one or more of the storage devices, a method for extending the  
file systems of the processors, comprising:

defining a hierarchically defined file extension policy, wherein the hierarchically defined extension policy indicates a hierarchical arrangement of groups of attributes for configuring an extension of the file system;

assigning a selected one of the digital data processor processors to the groups of attributes; to a first group associated with a default policy for file system extension;

assigning the selected digital data processor to a second group hierarchically related to the first group at a lower level, the second group inheriting at least a portion of the default policy and overriding the remainder of the default policy;

extending the file system of a digital data processor requesting an extension of the file system the selected digital processors, in response to a notification therefrom, in accord with the policy defined for the second group by adding storage to the file system of the requesting digital data processor according to the attributes in the at least one group of attributes associated with the requesting digital data processor.

17. (Canceled)

18. (Currently Amended) The method of claim 17, wherein the attributes are a member of a set of attributes comprising: a utilization threshold above which file system extension is requested, one or more storage devices accessible for file system extension, a range of storage capacities for accessible storage devices to be assigned for file system extension, maximum file system size, and a flag indicating whether file system utilization is monitored, and an alert interval for notifying a SAN administrator of a file system utilization exceeding a threshold since a previous notification.

19. (Currently Amended) The method of claim [[16]] 21, wherein assigning the digital data processors to the groups further comprising comprises assigning another one of the digital data processors to the first group and to a third group hierarchically related to the second group at a lower level, the third group inheriting at least a portion of the policy defined for the second group and overriding the remainder of the policy.

20. (Currently Amended) The method of claim [[16]] 21, wherein assigning the digital data processors to the groups further comprising comprises assigning another one of the

digital data processors to the first group and to a third group hierarchically at the same level as the second group, the third group inheriting at least a portion of the policy defined for the first group and overriding the remainder of the policy to define a file extension policy that is at least partially different from the policy defined for the second group.

21. (New) The method of claim 16, wherein the groups of attributes include a first group at a first hierarchical level and a second group at a second hierarchical level, wherein the first hierarchical level is hierarchically above the second hierarchical level, and wherein the requesting digital data processor is in the first and second groups, and wherein the first group includes at least one digital data processor other than the requesting digital data processor.

22. (New) The method of claim 16, wherein digital data processors associated with one group of attributes are also associated with all groups of attributes at hierarchically higher levels than the group with which the digital data processor is associated.

23. (New) The method of claim 22, wherein the attributes the process uses to configure the file extension for the requesting digital processor include attributes in the at least one group associated with the requesting digital processor, wherein a definition of one attribute at a lower hierarchical level is used over a definition of the attribute at one higher hierarchical levels.

24. (New) The method of claim 16, wherein at least one group comprises a host group policy defining attributes for configuring an extension to all file systems within each digital data processor associated with the host group policy, and wherein at least one group comprises a file system policy defining attributes for configuring a specified file system within each digital data processor associated with the file system policy.

25. (New) The method of claim 21, wherein the first group is associated with a first set of file extension attributes defining a default policy for digital data processors associated with that group and wherein the second group is associated with a second set of one or more file extension configuration attributes, wherein a definition of an attribute in the second set overrides

a definition for that attribute in the first set, wherein the configuration attributes of the second set, taken in conjunction with non-overridden configuration attributes of the first set, define a policy for the second group, wherein the process configures the file extension on behalf of the requesting digital data processor using the attributes defined for the policy of the second group.

26. (New) The SAN of claim 1, wherein digital data processors associated with one group of attributes are also associated with all groups of attributes at hierarchically higher levels than the group with which the digital data processor is associated.

27. (New) The SAN of claim 26, wherein the attributes the process uses to configure the file extension for the requesting digital processor include attributes in at least one group associated with the requesting digital processor, wherein a definition of one attribute at a lower hierarchical level is used over a definition of the attribute at one higher hierarchical levels.

28. The SAN of claim 1, wherein at least one group comprises a host group policy defining attributes for configuring an extension to all file systems within each digital data processor associated with the host group policy, and wherein at least one group comprises a file system policy defining attributes for configuring a specified file system within each digital data processor associated with the file system policy.

29. (New) A computer readable medium including a manager program in communication with one or more digital data processors and one or more storage devices, each having a file system that effects access to one or more of the storage devices, wherein the manager program is capable of causing operations, the operations comprising:

defining a hierarchically defined file extension policy, wherein the hierarchically defined extension policy indicates a hierarchical arrangement of groups of attributes for configuring an extension of the file system;

assigning the digital data processors to the groups of attributes; and

extending the file system of a digital data processor requesting an extension of the file system by adding storage to the file system of the requesting digital data processor according to the attributes in the group of attributes associated with the requesting digital data processor.

30. (Currently Amended) The computer readable medium of claim 29, wherein the attributes are a member of a set of attributes comprising: a utilization threshold above which file system extension is requested, one or more storage devices accessible for file system extension, a range of storage capacities for accessible storage devices to be assigned for file system extension, maximum file system size, a flag indicating whether file system utilization is monitored, and an alert interval for notifying a SAN administrator of a file system utilization exceeding a threshold since a previous notification.

31. (New) The computer readable medium of claim 29, wherein the groups of attributes include:

a first group at a first hierarchical level and a second group at a second hierarchical level, wherein the first hierarchical level is hierarchically above the second hierarchical level, and wherein the requesting digital data processor is in the first and second groups, and wherein the first group includes at least one digital data processor other than the requesting digital data processor.

32. (New) The computer readable medium of claim 29, wherein digital data processors associated with one group of attributes are also associated with all groups of attributes at hierarchically higher levels than the group with which the digital data processor is associated.

33. (New) The computer readable medium of claim 33, wherein the attributes the process uses to configure the file extension for the requesting digital processor include attributes in the at least one group associated with the requesting digital processor, wherein a definition of one attribute at a lower hierarchical level is used over a definition of the attribute at one higher hierarchical levels.

34. The computer readable medium of claim 29, wherein at least one group comprises a host group policy defining attributes for configuring an extension to all file systems within each digital data processor associated with the host group policy, and wherein at least one group comprises a file system policy defining attributes for configuring a specified file system within each digital data processor associated with the file system policy.